Borough of Rawtenstall.

ANNUAL REPORT

FOR 1898

OF

Medical Officer of Health

AND

Nuisance Inspector.

JAMES WHALLEY,
TOWN CLERK.

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MEDICAL OFFICER OF HEALTH

AND

NUISANCE INSPECTOR.

MEDICAL OFFICER'S REPORT.

HEALTH DEPARTMENT,

RAWTENSTALL, JAN., 1899.

To the Members of the Town Council of the Borough of Rawtenstall

GENTLEMEN,—

The area of the Borough is 9,528 acres, and the population at the last census was 29,507. During the past year it is estimated that the number of persons in the Workhouse averaged 342. Some increase in the population of the Borough has undoubtedly taken place during the past few years, a good number of houses having been built (see appendix) but these are to some extent tenanted by persons already living in the Borough, who have removed from inferior dwellings to those of a better class. For statistical purposes the population for this year is taken as 30,500, a figure which is, according to the average excess of births over deaths, probably a little less than actually exists.

During the year 1898 there were 569 deaths (83 of them in the workhouse) as compared with 625 in 1897, and the births were 811, as compared with 812 last year, which gives a natural increase of 242 for the year. Of the 83 deaths in the Workhouse, 57 were persons not belonging the Borough, and excluding these the death-rate for 1898 is equal to 16.78 per 1,000, as compared with 18.83 last year, 18.2 for 1896, and 18.3 in 1895.

The births comprise 409 males and 402 females, total 811, equal to an annual birth rate of 26.8 per 1,000, as compared with 27 for 1897, 26.6 for 1896, 29.2 for 1895, and 25.9 for 1894. The number of births this year is just one short of last year, but the increase of 500 in the estimated population has lessened the rate per 1,000 slightly

INFANT MORTALITY.

The total number of deaths below the age of one year in 1898 amounted to 127 as compared with 151 last year. Of these one was in the Workhouse, but was a child belonging the borough. The Infant Mortality for this year per 1,000 born amounts to 156.6 as compared with 182.2 for 1897, 173.7 for 1896, and 152 for 1895.

The following table shows the main causes of death in the two years, 1897 and 1898

INFANTS UNDER ONE YEAR OF AGE.

Causes of Death	1897.	1898.
Immaturity at birth and debility at birth	23	19
Gastro-euteritis	20	18
Diarrhœa	2	9
Convulsions	12	12
Atrophy or marasmus	6	14
Bronchitis	22	16
Pneumonia and broncho-pneumonia	9	2
Whooping Cough	9	3
Measles	11	3
Tubercular Meningitis	9	3
General Tuberculosis	1	2
Scarlet Fever		1
Atelectasis		7
Various other Causes	24	18
Total	1[illegible]8	127

Having already in previous reports dwelt at length on the subject of infant feeding and infant care, it is unnecessary again to enter into it. This year shows a very satisfactory decrease in the number of deaths, with practically the same number of births. An examination of the table shows that there has been a decrease of two deaths from gastro-enteritis, an increase of seven from diarrhoea, and a decrease of six from bronchitis. The totals for this year and last from these causes, which taken together are perhaps the best index of the care taken in the feeding and preservation of infant life, show a decrease of 11 this year as compared with last, the figures being 33 for 1898, 44 for 1897.

The greatest difference is in the number of deaths from measles and whooping cough, the total deaths this year from these two causes being 6, as compared with 20 last year. This year shows an increase to 9 in the number of deaths from diarrhoea as compraed with 2 last year. Eight of these were recorded during the phenomenally hot weather of September, and may be considered as being due to exceptional climatic conditions. The diarrhoea rate throughout the Kingdom was at that time extremely high, and I think we may fairly consider ourselves as very fortunate compared with the majority of places.

Only three of the medical men in the Borough give any information in the death certificates as to whether children were bottle or breast fed and consequently the figures are useless.

The total number of deaths below five years of age was 175 this year as compared with 233 last year, giving an annual rate of 5.73 per 1,000, as compared with 7.6 for last year and 6.6 in 1895 and 1896 The proportion of deaths below five years of age to the whole mortality has this year been reduced to 30 per cent. as compared with 36.5 for last year.

THE SEVEN PRINCIPAL ZYMOTIC DISEASES. —viz. : smallpox, measles, scarlet fever, diphtheria, and membranous croup, whooping cough, typhoid fever, and diarrhoea caused altogether 50 deaths during the past year as compared with 73 in 1897. The total Zymotic Death-rate is equal to 1.64 per 1,000, but excluding 18 deaths from diarrhoea, it is reduced to 1.05 per 1,000 as compared with 2.3 for 1897, 1.63 for 1896, 1.97 for 1895, 1.8 for 1894, and 3.3 for 1893.

The year under review shows therefore a very satisfactory diminution in the death-rate from these causes, the particulars of which will be better dealt with under the separate headings. The zymotic death-rate is of course governed chiefly by the incidence of such recurring epidemics as measles, whooping cough, scarlet fever, and diphtheria, and taken generally, forms only an unsafe guide to the sanitary condition of a district. But it may be safely assumed that a lessened rate for typhoid and diphtheria, if not also diarhoea,

which it is obvious may vary very much, as in the present year, owing to climatic conditions, marks an improvement in the sanitary state of the district on which we may rely.

SMALL-POX.—There has fortunately been no case of small-pox during the year. How long this state of things will continue under the present deplorable vaccination law is a question which time will no doubt quickly solve.

SCARLET FEVER.—Eighty-two cases of this disease have been notified in the past year, seven of them being in the Workhouse, as compared with 115 in 1897, 97 in 1896, and 225 in 1895. There were 4 in January, 8 in February, 2 in March, 8 in April, 4 in May, 5 in June, 5 in July, 0 in August, 3 in September, 7 in October, 17 in November, and 19 in December.

These figures are considerably less than last year, but show a remarkably similarity in their seasonal curve to last year and 1896. The fall to nil in August as compared with 2 during that month in 1897 represents the minimum, there is then a gradual rise (somewhat later this year), as the weather grows colder towards the end of the year, the figures this year for the last three months exceeding only by three those of last year, viz. : 43 and 40 respectively for 1868 and 1897. The simultaneous outbreak of the disease in widely separated parts of the district tends to confirm the opinion expressed by me last year, that other things being equal, the actual number of cases of scarlet fever is influenced and increased by the coldness of the weather, which tends to determine the actual development of the disease after exposure to infection in persons who might otherwise overcome it.

The closing of St. Mary's School in December, 1897, led, as was anticipated, to the removal of what had long been a source of infection. In January and February of this year, no case of scarlet fever occurred in Rawtenstall itself, the first case being reported on March 9th, at Springside.

As will be noticed the number of cases in the Borough remained small until October, when a simultaneous increase took place in widely separated portions. In November a still further increase was notified, chiefly in children attending the Cloughfold and Newchurch Schools. At my request the Rector closed the smallest infant class in the latter school for a fortnight, and since then no fresh case has been reported in children attending there. It is intended to thoroughly disinfect the Cloughfold School twice during the holidays, that having been already done at Newchurch.

The mortality has been five this year, the same number as in 1897, and 1896.

I have in my monthly reports already pointed out that the experience gained in Hospitals shows conclusively that a longer period of exclusion from school is required after scarlet fever than in most infectious disorders, and instructions have been sent accordingly to the various schools to exclude scholars from infected houses for 10 weeks. As the disease has been and is very prevalent in all the neighbouring boroughs with which we are in constant communication, we cannot hope to remain free, seeing that there is in neither Haslingden, Rawtenstall, nor Bacup, any Isolation Hospital for this disease.

Seven cases occurred in the Workhouse, and as children from there go to St. Mary's School, I wrote the Medical Officer, asking him to exercise great care in excluding all those who had been in contact with infected persons till at least 14 days had elapsed after removal to the isolation ward, but I have had no reply, and cannot say how far that has been carried out.

DIPHTHERIA. Thirteen cases have been notified in 1898, as compared with 23 in 1897, 32 in 1896, and 49 in 1895. It is to be regretted that of this number only three were submitted to bacteriological examination. All three were declared not to be diphtheria. Two cases not notified as diphtheria, but suspected, were submitted to bacteriological examination, and in both the germs of diphtheria were absent. Two of the cases which proved negative bacteriologically were shown, by the occurrence of cases of undoubted scarlet fever in the same house shortly afterwards to have been examples of that disease without the rash. The evidence derived from the few examinations made shows strongly how reliable the result is, and it is to be hoped that now, when the medical men of the district have become familiar with the matter, all cases of suspected diphtheria will be at once submitted to this examination. In none of the cases has the disease spread from the first affected person to any other, and there has been no spread of the disease in any of the schools.

Three deaths have occurred from diphtheria in 1898, as compared with 6 last year, and 4 in 1896.

Ten cases of MEMBRANOUS CROUP have been notified, as compared with 12 last year. In one house at East View, Newchurch, two cases occurred, but that is the only instance in which the disease has affected more than one person in a house, or has been probably conveyed from one person to another. It is to be hoped that the medical men of the district will also submit these cases to bacteriological examination. The experience of several years in this part of the borough has been entirely against the infectious nature of what is usually notified as membranous croup, and in very few cases have any such sanitary defects been observable in the houses or neighbourhood where it has occurred, as would justify one in considering it to be produced by want of sanitation. Hence in my opinion, the cause is catarrhel rather than zymotic, and as an index of the sanitary condition of the borough it is of little or no importance.

TYPHOID FEVER.—Last year shows a satisfactory decrease in the number of cases of this disease, 16 only having been notified in 1898, 38 in 1897, 28 in 1896, and 21 in 1895.

The incidence of the cases was as follows:—January 1, February 1, March 0, April 5, May 1, June and July 0, August 2, September 2, October 2, November 2, and December 2. In ten cases a bacteriological test has been made, and of these 5 were negatived and 5 affirmed. In most of those negatived the subsequent course of the disease proved that it was not typhoid, and in the 5 cases positive, the clinical evidence completely coincided with the bacterial test. Our experience of this test therefore is so far decidedly favourable.

In my monthly reports I have dealt at length on the sanitary defects of several of the premises affected, and it is not necessary here to recapitulate them. In two the water from a local supply was found to be polluted, in a third case, which was not subjected to Widal's test, the water supply was suspicious, but in several of the cases, the water, milk, and sanitary surroundings seemed to be above suspicion. We have fortunately this year had no evidence of direct contamination of water supplies from excreta laid on the land, and hence no general outbreak, the whole of the cases having been sporadic, and apparently owning no cause in common. One instance only of infection of another person from the first has occurred, but that is sufficient to show the necessity of careful isolation. Without professional help it is almost too much to expect that ordinary persons will take all the precautions necessary to prevent the spread of the disease to the attendants or the family. The commonest error seems to be the bringing of crockery, spoons, etc., out of the sick room, and their use subsequently by other persons. I have visited all the houses implicated, and personally instructed the attendants in these matters, and in all cases separate pails have been supplied for excreta, and instruction given in the use of disinfectants.

One case was distinctly traceable to the emptying of an old privy pit. We may hope that as a result of the extension of the water carriage system and the abolition of the remainder of these abominations still existing, a further diminution in the typhoid rate will soon occur. Besides the privy large ashpits common to a whole row of houses are a great nuisance and source of danger. The temptation to empty the chamber utensil containing the excreta and urine of children therein seems to some women irresistible, and this, mixed with vegetable debris, ashes, and the like, constitutes a most dangerous mass of germ-producing matter, in close proximity often to the usual playground of children. Wherever possible the substitution of the ash-bin is safer, and would lead to the exclusion of both excreta and vegetable refuse from the ashes. In two instances, one at Turn Hill, and the other at Goodshaw Fold, to which I drew your attention, no ashpit at all existed for a whole block of houses, the ashes and rubbish being simply deposited at the end of the block.

MEASLES.—At the close of last year this disease, which had been epidemic in the borough, had apparently died out, only one death being recorded from it in December. In the first three months of this year no death occurred from it. In April, however, a fresh epidemic broke out, and the number of cases in the Waterfoot Board School was so great that on my advice the Infant School was closed. A good many of the scholars of Piercy School were also attacked, but by careful exclusion the spread of the disease was arrested without complete closure. A few cases in Rawtenstall occurred in May, but in June the epidemic had spent itself, and no further deaths have since been reported.

The total number of deaths was 3 in 1898, 22 in 1897, 24 in 1896, 5 in 1895.

We still get less information from the schools and school attendance officer about measles than is desirable and necessary to prevent its spread. Very rarely is any information sent, and it is only from private sources, often after the disease has already spread pretty well, that it comes to my knowledge. I have spoken several times to the school attendance officer about it, and have also addressed a circular letter to the schoolmasters, and would again urge upon them the importance of co-operating with the Sanitary Authority, not only in preventing the spread of this, but other infectious diseases, by furnishing me with information of their existence among the children as early as possible.

WHOOPING COUGH.—The year 1898 has been comparatively a fortunate one so far as whooping cough is concerned, only four deaths having been recorded as compared with 18 last year, 8 in 1896, and 15 in 1895, and all of these in children below 5 years of age. The mortality from this disease is, however, as will be noticed, still nearly as great as that from scarlet fever. Last year I dwelt at some length on the importance of excluding children from school in the early stages of the cough, as it is then most infectious and dangerous to others. I also pointed out the pernicious practice of allowing children suffering from the disease, to be exposed to cold, either out of doors or in cold bed-rooms. and in that way bringing on the complications such as bronchitis and pneumonia, which produce death. Greater attention to these matters would certainly materially lessen the mortality which is, in my opinion, very largely preventable.

DIARRHOEA.—This year has been remarkable for the excessive heat in September, and as a natural consequence, there has been a considerable increase in the number of deaths from diarrhoea There were 12 deaths in September from this cause, 8 of them being children, mostly below the age of 1 year. The majority were certified as zymotic diarrhoea. Two deaths in young children also occurred in October, certified as zymotic diarrhoea. The total number of deaths was for the year 1898, 18, as compared with 5 in 1897, 15 in 1896, and 23 in 1895. The mortality, though considerable here, was certainly proportionately very much less than in most other places. It is a common experience to find this kind of acute diarrhoea supervening and rapidly running to a fatal termination in children, who from bad feeding have been previously loose in their bowels. Hence, though the hot weather is the exciting cause, a considerable proportion may be justly attributed to gastro-enteritis already existing. Heat enoromusly increases the growth of germs of all kinds in the milk, and the importance of boiling all milk as soon as received, and afterwards keeping in a cool place, carefully excluded from the air, is still further enhanced during hot periods.

RESPIRATORY DISEASES.—The total number of deaths during 1898 was 112, as compared with 152 in 1897. Excluding 8 outsiders who died in the Workhouse, the mortality amounted to 104, as compared with 139 in 1897, and 123 in 1896, giving an annual death rate of 3.4 per 1,000, as compared with 4.6 for 1897, 4.1 for 1896, and 5.4 for 1895. The number of deaths below five years of age from these causes was 31, equal to about 25 per cent of the whole. The number of deaths recorded from influenza was very small, but there can be no doubt from its prevalence during the earlier part of the year, and again during the last two months, that it was the primary cause of many of the adult deaths at least. The monthly returns for the year 1897 and 1898 for the borough are given below:

	Jany.	Feb	March	April	May	June
1898	14	11	10	12	7	6
1897	8	14	11	14	14	11

	July	August	Sep	Oct	Nov.	Dec.
1898	10	4	8	4	4	6
1897	11	2	5	8	6	28

These figures show the influence of climatic causes. The high figure in December, 1897, was due to the fortnight's severe weather at the end of that month. The early spring months, April and May, are, in this district, usually marked by severe, if short, snaps of cold, and the mortality from pneumonia is, during those two months, the greatest in the year. According to my observations it is a rarity for the second week in May to pass without more or less snow covering the hills.

The lessened mortality this year is no doubt explainable by the comparative mildness of the winter, and the exceptionally fine summer.

PHTHISIS was the cause of 32 deaths in the Borough, and 11 in the Workhouse. Nine of the latter were persons not belonging to the place, and excluding these the total deaths from phthisis were 34, as compared with 36 in 1897, equal to an annual death-rate of 1.1 per 1,000, as compared with 1.3 in 1897 and 1896,1.36 for 1895, 1.16 for 1894. The total deaths from all tubercular affections, excluding the outsiders, was 46, as compared with 49 for 1897, and 56 for 1896. The total death-rate from all tubercular affections being 1.5 per 1,000, as compared with 1.6 for 1897, and 1.8 for 1896.

Last year I drew your attention to the now recognised nature of consumption, its infectious character, and the fact of its origin in many cases from milk, and the diffusion of the germs in rooms, workshops, and public conveyances, etc., by the dried spit of consumptive persons. I also supplied you with a leaflet which I thought would prove useful if distributed throughout the district, and suggested the disinfection of all houses in which persons had died of phthisis. It is probable the latter proposition, without further information by means of such a leaflet, would meet with more than ordinary opposition. The first step, therefore, seems to be to prepare the way for the disinfection of houses by enlightening the minds of those concerned, and at the same time, as was done in the leaflet proposed, offering to do the work at a convenient time after a death has occurred. I think a circular might be drafted which could be posted by me, to the address at which a death had taken place, offering these facilities, and asking that the time when it would be convenient to disinfect should be sent to Mr. Rawling.

The importance of this question has now been so prominently brought before the public and its local and national importance have been so well pointed out, that it seems unnecessary further to elaborate it. It is, however, rather through local than national organisations that the best work can be done. No doubt Sanatoria will before long be provided, and will help materially to prevent the spread of the disease, but in the meantime, in every little borough such as ours, numerous foci exist for its diffusion from those already infected, and it is our duty to take all the steps within our power to prevent this. The fact that consumption is acquired from the spit of some other person, or from milk or food containing tubercle germs, and is not as was formerly supposed, a hereditary disease,must be driven home and grasped by the people, and the sanitary authority, and then it is not unreasonable to hope for a considerable lessening of this dreadful scourge.

During the year I have had in my own practice 3 deaths in young persons supplied by milk from a cow known to be suffering from grapes, and another case, in a farmer's wife, of a tubercular nature, which seems to have been produced in the same way. The evidence in the first 3 cases is beyond dispute, but the information as to how the disease had been produced came to me in a very roundabout way, and only after the cow had been killed to put it out of its sufferings.

It is next to impossible to isolate a consumptive person in a cottage house, or confine the patient to one room, hence the greater need for a thorough understanding of the infective nature of the disease by the other members of the family. Literature carefully distributed can be supplied at small expense, and do its salutary work without either fuss or personal attention. Surely a small item like this in the printing account, and the extra work in disinfecting would be worth all it cost.

DISINFECTION AND ISOLATION.—The disinfection of bedding, etc., in all cases of infectious disease has been carefully and systematically carried out by the steam apparatus, and infected rooms, houses, and schools have been fumigated.

The question of isolation remains in statu quo. We have no provision for the isolation of any disease other than small-pox. I know that steps have been taken to get the neighbouring boroughs to combine, which have proved abortive, but that does not, in my opinion, relieve us of our own responsibility in the matter. Having recently mentioned it in a monthly report, which was met by a resolution delaying the taking of any steps, my responsibility is at an end, but one may be permitted to hope that wiser counsels (if not Councils) may yet prevail.

SCAVENGING, SEWERING, ETC.—The scavenging is done by the Corporation carts, and has been done with few complaints during the year. There still exist a good many large aspits, some of them uncovered, a number of which have recently been drawn attention to. I have elsewhere adverted to the many evils of the large ashpit, and it seems to me quite feasible to cover the sites of these with a roof, do away with one of the walls, and substitute tubs or pans for the present system. This would necessitate more frequent emptying, but the greater ease obtained by the substitution of pans would much facilitate the process.

Below is a tabular report from the Borough Surveyor, showing the work done in extending the sewerage, what still remains to be done, and the number of houses already connected up.

RAWTENSTALL MAIN SEWERAGE.

STATEMENT SHEWING LENGTHS AND POSITIONS OF MAIN SEWERS LAID UP TO DECEMBER 31st, 1898.

TRUNK SEWERS.

No.	POSITIONS,	LENGTHS.		
		Miles	Fur.	Yards
1.	—Rawtenstall and Bacup Joint Outfall Sewer from Queen's Corner to Outfall Works, Ewood Bridge	1	5	119
2.	—Rawtenstall and Bacup Joint Outfall Sewer from Queen's Corner to Borough boundary at Thrutch	2	0	22
3.	—Sewer from Queen's Corner, through the Fold, along Burnley Road to Lord Street, Crawshawbooth	1	5	120
4.	—Sewer from the Square, Waterfoot, along Burnley Road to Albert Works, Whitewell Bottom	1	4	88
5.	—Sewer from Albert Works, Whitewell Bottom, to Graver, Weir Mill, Culvert..	1	2	116
	Sewer in Haslingden Road, from Queen's Corner to opposite top side of Reformers Chapel	0	1	55

SUBSIDIARY SEWERS.

Sewer in Holt Mill Road, Warth	0	0	50
Sewer in Bank Street	0	2	33
Sewer in Lord Street, Rawtenstall	0	0	45
Sewer in Miller Barn Lane, from end of Townsend Street to centre of Tenterfield Street	0	0	33

Sewer in Cow Lane and Captain Fold.....	0	1	0
Sewer in Lord Street, Bank Street, to Bacup Road	0	0	180
Sewer in Townsend Street, Waterfoot......	0	0	130
Sewer in Back Barlow Street, Rawtenstall	0	0	35
Sewer in Albert Street, Rawtenstall........	0	0	74
Sewer in Marcross Street, Rawtenstall.....	0	0	56
Sewer in King Street, Waterfoot	0	0	50
Sewer in Dean Lane, Water	0	4	74
Sewer in Warth Road, Waterfoot	0	1	30
Sewer in James Street, Haslam Street, and Richard Street, Rawtenstall	0	2	130
	10	2	0

NOTE.—In addition to the foregoing there are several lengths of subsidiary sewers in both public and private streets (i.e., Hill Street, Corporation Street, Adelaide Street, etc., Crawshawbooth; James' Street, Grange Road, Springside, etc., Rawtenstall; Thornfield Street, Myrthom Estate, St. James' Street, etc., Waterfoot) of a more or less efficient character, which are expected to be connected up very shortly.

RAWTENSTALL MAIN SEWERAGE.

STATEMENT SHEWING LENGTHS AND POSITIONS OF MAIN SEWERS STILL TO BE LAID.

POSITIONS.	Length Required to drain existing property.	
	M.	F.
Sewer in Burnley Road from Lord Street, Crawshawbooth, to Borough boundary..............	1	6
Sewer in Goodshaw Lane	0	5
Sewer in Goodshaw Fold	0	6
Sewer in Boothfold Road	0	4
Sewer in Bridleway	0	2

Sewer in Back Street, Newchurch	0	1
Sewer in Old Street, Newchurch	0	1
Haslingden New Road	0	4
Haslingden Old Road	0	5
Newchurch Old Road	0	7
Bury Road	0	6
Peel Street and Higher Cloughfold	0	2
Dobbin Lane, Cloughfold	0	1
Fall Barn Road	0	4
Hill End, Cloughfold	0	2
Holme Road, Townsend Fold	0	4
Ewood Bridge	0	0
Cowpe	1	0
Wales Road	0	2
Edgeside	1	1
Shawclough Road	0	1
Waingate Road	0	0
	11	0

NOTE.—PRIVATE STREET WORKS.—Contracts just about to be let for 22 streets, comprising 1½ miles of sewers and connections of 155 houses, the closets at most of which it is expected the owners will convert to the water carriage system

HOUSE DRAINAGE.—Since the commencement of the Rawtenstall Sewerage Scheme about 1000 houses have been connected under supervision of the Corporation, with the trunk sewers, including ten schools, mills, and similar premises.

It is also probable that at least two hundred more houses are connected than above named, being those in communication with subsidiary sewers laid prior to the trunk sewers being started.

The allowance made by the Corporation towards the cost of converting pail and other closets to the water-carriage system has been largely taken advantage of. At the houses, etc., above referred to, there are now 270 slop water closets and 140 fresh water cistern closets.

As there are probably nearly 100 more w.c.'s in the town at the better class houses, there now appear to be about 500 water closets in the Borough.

About 400 pail closets still remain unaltered at the houses connected up, but the owners, in the majority of cases, are willing to convert at the earliest favourable time.

Many side connections across roads have been put down by the Corporation for future extension by owners to their properties.

WATER SUPPLY.—The Bury water which supplies the greater part of the Borough, has been so fully discussed during the year in Parliament and out, that nothing further need be said about it.

During the year a good many Local Supplies have been examined and dealt with, some in connection with outbreaks of disease, and others because it was obvious, the water was polluted. In one or two instances it seemed to me policy to have the water supplying a large number of houses, like that at Goodshawfold, tested, so that once for all its purity or impurity might be settled. There is still a good deal to be done in the way of improving the storage cisterns, fencing and raising them above surface land, and making them impervious to surface pollution.

I have reported on the following:—

(1) Water from Chamber Height supplied to Emmett's and other houses at Lumb.

(2) Water Supply to Crabtree's Buildings, Whitewell Bottom.

(3) Mr. Worswick's water at Hall Carr, which was found to contain lead in dangerous quantity.

(4) Water Supply to Turn Hill, Dean.

(5) Water derived from Liver Hills supplied to a large number of houses at Lumb.

(6) Water Supply to terrace of houses at Loveclough.

(7) Goodshaw Village public supply.

(8) Water supply to Baxter and Wilson's property at Waterfoot.

(9) Water supplied to Greenmount Terrace, Waterfoot.

The Borough Surveyor informs me that 66 Notices have been served upon owners of defective water supplies during the year.

The Borough is this year applying for Powers to supply itself, and a Bill is already lodged in Parliament. The faults of the Bury water have been so manifested, and unfortunately still continue to manifest themselves daily, that the necessity for some other and better supply is urgent. Undoubtedly much less assistance to the substitution of public for defective private supplies would be met with if we had an undeniably good supply of our own. As it is, many object, not unnaturally, to have anything to do with the Bury water.

MILK SUPPLY.—During the year considerable further progress has been made in the inspection of Cowsheds. How defective many of them are in construction, ventilation, cubic space, and means of cleanliness I pointed out last year, and this is fully borne out by Mr. Rawling's report. I have mentioned under the head of Phthsis one striking illustration of the danger of milk from tuberculous cattle, which has come under my own observation. An agitation in Manchester in favour of the testing of cows with tuberculin, has probably not escaped your notice, and undoubtedly scientific accuracy can only be satisfied in that way. Short of that, however, much good may be done by periodic inspection of the cattle, and it seems to me, after such an example as has been just alluded to, that it is quite time some steps in that direction were taken here, if such dire mischief is to be prevented. The death return shows six deaths from tubercular disease in infants under one year, and it is fair to assume that some of the cases of bronchitis were not unmixed with a tubercular element. Exactly what part the milk played in the production of these cases it is impossible to say, but the evidence in other places, such as Manchester and Liverpool, where the milk has been bacteriologically examined, shows beyond question how many cases probably owe their origin to this cause.

Many of you may be, through the medium of the public press, already familiar with the figures obtained on bacteriological examination, but it may not be out of place briefly to recapitulate them. In a report issued by the Medical Officer of Health of Liverpool, Professor E. W. Hope, it was stated that 144 samples of milk from the city cowsheds. and 24 samples taken at railway stations, had been sent to four eminent bacteriologists. Of the former, 2.1, and of the latter 29.1, proved to contain the infection of tubercle. In 93 samples examined by Professor Delepine, in Manchester, seventeen, or in other words over 18 per cent. have proved to be tuberculous. Mr. King's, of Manchester, examination of the cows in 16 dairies, showed that in 14 of them one or more cows were found to have indurated udders, presumably tuberculous. These facts speak for themselves, and they are in entire agreement with similar observations made on the Continent and in America.

There is no doubt we are much behind the times in the matter of cowsheds, inspection of cattle, and examination of milk, but its importance is such that it must force itself on the attention of every Sanitary Authority worthy of the name.

During the year Mr. Rawling informs me that the number of farms visited has been 180, and the number of cowsheds measured up and examined, 268. The details will be shown in his own report.

BAKE-HOUSES AND COMMON LODGING-HOUSES.—I have visited the whole of these during the year, and find them in accordance with the regulations, with the exception of one bakehouse, occupied by Hartley, near the Bishop Blaize. That I found had a door communicating with an imperfectly ventilated stable. I have ordered the door to be boarded up.

The usual tables as supplied to the Local Government Board are appended.

I am, Gentlemen,

Your Obedient Servant,

JAMES McNAUGHT.

Appendix.

BOROUGH OF RAWTENSTALL.

BUILDINGS, ETC., ERECTED DURING THE YEARS 1892 ~~[illegible]~~ TO 1898 IN THE BOROUGH.

Surveyor's Office,
December 30th, 1898

Years.	Work shops.	Houses, &c.	Banks, Schools, &c.	Lock up Shops.	Various Buildings.
1892	4	108	5	...	12
1893 ~~1593~~	1	73	2	...	10
1894	5	79	4	...	8
1895	4	71	1	...	6
1896	11	151	3	...	7
1897	9	163	1	31	47
1898	4	103	1 (Theatre)	14	34
	38	748	17	45	124

TABLE B.

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Borough of Rawtenstall; classified according to DISEASES, AGES AND LOCALITIES.

	POPULATION AT ALL AGES.		Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LOCALITY. COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.					
	Last Census.	Estimated to middle of 1898.			Scarlatina.	Dipththeria.	Membranous Croup.	Enteric or Typhoid Fever.	Puerperal.	Erysipelas.
Borough (H)	29,507	30,500	811	Under 5	26	5	9	1	...	1
				5 upwards	49	8	1	15	4	51
Workhouse	..	(342)	..		...	...	...	...	...	...
					7	...	...	...	...	2
Totals	29,507	30,500	811		26	5	9	1	...	1
					56	8	1	15	4	53

TABLE A.

TABLE OF DEATHS during the Year 1898, in the Borough of Rawtenstall, classified according to Diseases, Ages, and Localities.

	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.								MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.														
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15	15 and under 25.	25 and under 65.	65 and upwards.		Scarlatina.	Dipththeria.	Membranous Croup.	Enteric or Typhoid Fever.	Puerperal Fever.	Erysipelas	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Phthisis.	Bronchitis, Pneumonia, & Pleurisy	Heart Disease.	Injuries	All other Diseases.	TOTAL.
Borough	486	126	47	27	20	158	108	Under 5	4	3	10	...	...	...	3	4	11	1	30	...	1	106	173
								5 upwards	1	...	1	2	2	2	...	...	7	31	66	34	13	154	313
Workhouse	83	1	1	...	3	45	33	Under 5.	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2
								5 upwards.	...	...	...	..	...	...	...	...	...	11	15	17	2	36	81
TOTALS......	569	127	48	27	23	203	141	Under 5.	4	3	10	...	...	...	3	4	11	1	31	...	1	107	175
								5 upwards	1	...	1	2	2	2	...	...	7	42	81	15	15	190	394
Deaths occuring within the District among persons not belonging thereto	57	...	...	...	3	34	20	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
								5 upwards	...	...	...	...	...	...	...	...	...	9	8	9	2	29	57

Nuisance Inspector's Report for 1898.

Number of nuisances reported, 164; representing 478 houses and premises; notices served for abatement of nuisances, 1st, 206; 2nd, 17; total, 223.

Proceedings were taken in four cases. In each case the work required was carried out and the cases withdrawn on payment of the costs.

Work Accomplished: New closets erected, 6; closets reconstructed on the pail system, 24; closets repaired, 7; closets reconstructed on water carriage system, 185; closets provided with new pails, 14; dirty closets, passages, yards, etc., cleaned, 22; total, 258. New ashpits erected, 1; ashpits repaired, 3; ashbins provided, 8; total, 12. New drains laid, 46; drains cleaned out, repaired, trapped, etc., 83; total 129. Slopstone pipes disconnected from drains, 20; total 20. Chimneys raised, 2; overcrowding abated, 1; water removed from flooded cellars, 3; middens of manure, refuse, &c., removed, 3; total 9. Butchers refuse removed weekly, 7; greengrocers refuse removed weekly, 9; total 16. Notices served to deliver bedding for disinfection, 2; houses dissnfected after Infectious Diseases, 76; bedding, &c., removed and disinfected, 76; Schools disinfected, 2; total 154. Registered common lodging-houses visited, 4. Living Vans attending fairs visited, 49.

Slaughter-houses visited and inspected, 34; Tripe dressing premises visited and inspected, 4; skin cleaning premises visited and inspected, 1; total 39. Samples of water submitted for analysis, 6.—Returned as being good, 3; of doubtful purity, 1; liable to Surface Pollution, 2; total 6.

Dairies, Cowsheds, and Milkshops Order of 1896: Number of Farms visited, 180; Number of Cowsheds measured, &c.. 268.

Scavenging work done: Number of excreta pails emptied, 207,546, number of ashpits emptied, 5,355; number of ashtubs emptied, 91,183; number of excreta tanks emptied, 366; number of loads of excreta, ashes, &c., removed, 14,175.

Contagious Diseases of Animals Act (suspected rabies). Two cases of suspected Rabies were reported, the first case was a dog belonging to William Henry Wilkinson, Phillipstown, Whitewell Bottom, but which on examination was fonnd to be suffering very severely from distemper. I recommended the owner to have it destroyed, and this was done and the carcase buried.

The second case was a dog belonging to Heber Shenton, of 12, Major Street, Crawshawbooth, in this case a post-mortem was made by Mr. W. D. Simpson, Veterinary Inspector, who certified it to have suffered from congestion of the lungs and distemper.

Swine Fever: There were three cases of suspected Swine Fever reported within the Borough, during the year. The first of these occured at Thomas Barnes', Millerbarn Lane, Waterfoot, on the 16th of June. These pigs were seen by Mr. Simpson, who believed them to be suffering from Swine Fever. They were reported to the Board of Agriculture, London, and after examination they confirmed Mr. Simpson's opinion. The remaining pigs were then slaughtered and buried.

The Second case was reported by Enoch Tattersall, from Waingate Farm. One of the pigs was ill, and he was afraid it was suffering from Swine Fever. I got Mr. Simpson to inspect them, and we were both of opinion that it was not suffering from Swine Fever, and it was soon well again.

The third case was reported from Joseph Barratt's farm at Lumb. These pigs were examined by Mr. W. D. Simpson, who was of opinion that they were suffering from Swine Fever. They were reported to the Board of Agriculture, who after the slaughter and examination of one of the pigs, confirmed Mr. Simpson's opinion. The remaining pig was then slaughtered and the carcase buried.

Cattle: On the 25th February, I called in Mr. Simpson, Veterinary Inspector, to examine a cow belonging to Joseph Eastwood, at Goodshaw, and he found it to be suffering from tuberculosis. The cow was afterwards sold and removed to Haslingden, where it was destroyed.

On the 21st May, I took Mr. Simpson's assistant to examine a cow at Haworth's Farm, Gambleside, which was reported ill. He gave his opinion that the cow was suffering from tuberculosis, and recommended them to have it removed and slaughtered, which was afterwards carried out.

Anthrax: On the 30th July, a case of Anthrax was reported on Mr Joshua Trickett's farm, Lumb Holes, Waterfoot. Mr. Simpson saw the cow, and gave his opinion that the cow had died from Anthrax.

A second case was reported on Mr. Joshua Trickett's Rough Lea Farm, on the 19th October. A young cow died just on the point of calving. A post-mortem examination was made by Mr. Simpson, who certified it to have died from Anthrax. Both carcases were buried and covered with quick-lime, and also reported to the Board of Agriculture, London,

GEORGE RAWLING,

Sanitary Inspector.